## University of Minnesota The Medical School Minneapolis 14

DEPARTMENT OF BACTERIOLOGY
AND IMMUNOLOGY

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Joshua and Esther Lederberg Department of Bacteriology University of Melbourne Carleton N3 Melbourne, Victoria, Australia.

Dear Josh and Esther:

We were quite pleased that you got off on your trip without undue delay. Trust that you have found the trip both pleasant and profitable. Your climate could be no more unpleasant that Minnesota and Wisconsin these past few days. It has rained. No not really rain, rather tears of the Republicans after teh defeat of Kohler by Proxmire.

We were in Madison yesterday. We went down to see how everything was progressing. Most of you were on vacation or trips but we saw several old friends and had a thoroughly enjoyable time. Visited Bob in the hospital. He was running around from place to place cheering up the rest of the floor. His problem worked out very well from all indications. A considerably stronger case can be made for cytoplasmic inheritance now. I hope that he tries to infect now.

We have nothing really new since last December. The mutents which come out of heterokaryons are frequently different one from the other——i.e. of 8 cyst—dissociates there are 3 distinctly different types, as indicated by ability to form prototrophic heterokaryons. We do get the feeling that there may be recombination involved also but the mutents complicate things. Presumptive recombinants are always rare——less than 2% of the products of sectoring prototrophs. None (presumptive recombinants) can be obtained by direct plating of the spores from mixed growth. That we can go into at some later date perhaps.

Ann was busy isolating new mutants and Heumann was in the lab. Could not find Newt Morton to learn something about the new facilities in Medical Genetics.

Our transduction experiments have been something less than spectacular. Products of the metabolism select for different types. More or less the same type of thing that Werner Braun has with alanine and Brucella. I must not know how to design experiments for I always seem to get involved in this sort of stuff. Oh well, it keeps the boys off the streets.

We have been looking at some clinical materials. The Streptomyces are non-pathogenic? We have found that some of the organims called No cardia are S treptomyces through and through. Where the Streptomyces comes from is in doubt.

S yve rton is still in Europe but will start back in a week. He intends to hide away in a lab here next year and avoid all administrative duties. This is unlikely however because he failed to delegate any authority.

I had best end. Our very best wishes.

S. Sey len Bradley